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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/570,239

02/28/2006

Lucas Leo Desiree Van Der Poel

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

SCHILLER, ALINA

ART UNIT

PAPER NUMBER

3671

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/570,239	<b>Applicant(s)</b> VAN DER POEL, LUCAS LEO DESIREE	
	<b>Examiner</b> ALINA SCHILLER	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: the proper headings (Background of the Invention, Brief Summary of the Invention, etc.) are missing. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3, 5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woods 3,188,927 in view of Sools et al 6,092,909.**

Regarding claim 1, Woods discloses a road-marking system for influencing the distance (col. 1, lines 7-9; col. 2, lines 22-29; 34-36; 41-44; col. 3, lines 31-37; 45-47; col. 4, lines 35-37) between vehicles traveling over a roadway (as seen in Fig. 1), comprising:

- a plurality of road-marking units (M1, M2, M3, etc.),
- the road-marking units being provided with light means for emitting or reflecting light in the direction of a driver of the vehicle (col. 2, lines 44-51; col. 4, lines 4-6),

- the distance between the road-marking units being indicative of the desired distance between the vehicles (col. 1, lines 7-9; col. 2, lines 22-29; 34-36; 41-44; col. 3, lines 31-37; 45-47; col. 4, lines 35-37).

However, Woods fails to disclose that a set of the road-marking units, of which in operation a part is in an active state while the remainder of the road-marking units is in an inactive state; and the distance between the active road-marking units in the set is indicative of the desired distance between the vehicles.

Sools teaches that it is well known in the art to have road-marking units that can be switched from an activated or active state, when light is reflected, to a de-activated or inactive state, when light is absorbed, which have the advantage that they can be switched between visible and invisible in bright environmental light (Abstract; col. 1, lines 29-31). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Woods to have a set of the road-marking units, of which in operation a part is in an active state while the remainder of the road-marking units is in an inactive state, since this concept is well known in the art of road-marking units, so that their visibility or invisibility can be control, as taught by Sools.

The combination above would inherently result in a system that would allow the distance between the active road-marking units to be set to be indicative of the desired distance between the vehicles, since as taught by Woods, it is desirable to have the distance vary dependent upon the traffic.

Regarding claim 2, the combination above results in that the set of active road-marking units being in the active state intermittently.

Regarding claim 3, the combination above discloses that the light emitted or reflected by the set of active road-marking units is tuned in response to conditions during the day or during the night (Sools: Abstract; col. 1, lines 29-31).

Regarding claim 5, the combination above discloses that the light means for emitting light comprises a light-emitting diode (Sools: col. 1, lines 58-61).

Regarding claim 8, the combination above discloses that the road-marking units are provided in the surface of the roadway (Sools: col. 3, lines 4-5).

Regarding claim 9, Woods discloses that the road-marking units are provided on one side of the roadway (as seen in Fig. 1).

**Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woods 3,188,927 in view of Sools et al 6,092,909, as applied to claim 1 above, and further in view of Hohl 5,873,674.**

The combination above discloses an apparatus as previously described, but fails to disclose that the road-marking units are shaped as chevrons. Hohl teaches that it is well known in the art to have road-marking units shaped as chevrons (62, Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of the combination above to have the road-marking

units shaped as chevrons, as taught by Hohl, as an alternate design well known in the road marking art.

**Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woods 3,188,927 in view of Sools et al 6,092,909, as applied to claim 1 above, and further in view of Van Der Poel et al 2002/0012244.**

The combination above discloses an apparatus as previously set forth, but fails to disclose that the light means for emitting light is formed by an end portion of an optical fiber. Van Der Poel teaches that it is well known in the art to have a road marking system with the light means for emitting light formed by an end portion of an optical fiber as a very suitable alternative light source for use in a road-marking system ([0016]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of the combination above to have the light means for emitting light formed by an end portion of an optical fiber, similar to that of Van Der Poel, as a very suitable alternative light source for use in a road-marking system, as taught by Van Der Poel.

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woods 3,188,927 in view of Sools et al 6,092,909, as applied to claim 1 above, and further in view of Webber 2002/0180687 and Engel et al 4,981,885.**

The combination above discloses an apparatus as previously set forth, but fails to disclose that the light means for reflecting light comprises a reflective electrophoretic display device. Webber teaches that it is well known in the art to use electrophoretic displays as light means for reflecting light in printing or coating on large and arbitrarily

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shaped or curved surfaces with low power consumption and cost ([0006]; [0007]; [0172]). Engel teaches that it is well known in the art to use the cataphoresis electrocoating process (col. 13, lines 8-9) in road markings (col. 9, lines 58-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of the combination above to have the light means for reflecting light comprising a reflective electrophoretic display device to obtain a low cost apparatus, as taught by Webber, since using an electrophoretic display device is well known and used in road markings, as taught by Engel.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALINA SCHILLER whose telephone number is (571)270-3088. The examiner can normally be reached on Mon-Fri, 7:30AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas B Will/  
Supervisory Patent Examiner  
Art Unit 3671

AS  
7/30/08